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ABSTRACT

As head of the Department of Pedagogy at the University of Chicago, John Dewey established an elementary school where a new curriculum could be put into practice, evaluated, and refined. This paper discusses how the activities of the school put Dewey's theories into practice generally, and particularly how they were applied to music education. Dewey's published works and the contemporaneous notebooks of teachers at the Chicago Laboratory School are the main sources for this analysis. Following Dewey's theories, teachers used constructive activities as the medium for cultivation of the children's imagination; children were encouraged to express their ideas through various modes. Dewey found evidence for stages in mental development in young children beginning with an early imaginative stage, later becoming experimental, reflective thinking. Children's musical intelligence was seen as developing through their ability to form and express mental images of musical wholes. Images then became the tool of instruction. Once simple melodies and words were grasped as thought expressed in musical form, then ideas could be expanded into their essential elements: melody, rhythm, and harmony, moving from simple to complex. Group composition was encouraged as it combined action and reflected the children as social individuals. Young children were encouraged to express their ideas in multiple ways, to question, and to try new learning experiences. (Contains 39 references.) (JLS)

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Cultivating the Imagination in Music Education: John Dewey's Theory of Imagination and its Relation to the Chicago Laboratory School

A paper presented for the John Dewey Society

at the Annual Meeting of AERA

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Cultivating the Imagination in Music Education: John Dewey's Theory of Imagination and its Relation to the Chicago Laboratory School

While John Dewey was head of the new department of pedagogy at the University of Chicago, he established, with the help of parents and other university faculty, an elementary school where new curriculum could be tried out, evaluated, and refined. Dewey claimed that imagination, the capacity to realize mentally the manifold possibilities of a situation, was the medium within which children lived. In what ways did the activities of the school put Dewey's theory into practice? Using a hermeneutic method, the author reconstructed what Dewey wrote about the imagination, a characteristic of early humans and of young children, as well as a continuing element in reflective thinking. Dewey's work provided a lens through which the activities of the school were examined: Teachers used constructive activities as medium within which the imagination was cultivated; children expressed their ideas through various modes (e.g., drawing, clay modelling, writing) and in extended conversations, thereby making clearer the connections between the given and the inferred. This paper examines the relation of imagination to the practice of music education in particular.

INDEX WORDS: Music education, John Dewey, Elementary education, Hermeneutics, Imagination

Cultivating the Imagination in Music Education: John Dewey's Theory of Imagination and its Relation to the Chicago Laboratory School

Throughout his years of writing about human action in an evolving world, John Dewey presented the importance of the image in the development of experience (1895/1972g, 1897/1972d, 1899/1976d, 1920/1988b). Dewey's rich understanding of imagination differed from that of earlier philosophers; in place of the image as representative, Dewey presented the image as an operative element in an ongoing situation. When writing about children's mental development (1899/1976d, 1900/1976c), he presented imagination as a characteristic of their early years. Children expand their present experiences through their emotionally colored, loose associations of prior experiences. Building on ideas articulated by William James, Dewey (1896/1972f) argued that the image plays an anticipatory role within a complete reflex circuit; this role would later be formulated as a deliberative phase within a complete act of reflective thought (1910/1985b).

Imagination, the "power of imaging" (1902/1991e, p. 242), is a basic process in human experience. In Dewey's understanding of imagination we can see the continuity within several dualisms: the body and the mind, the individual and the social, the cognitive and the emotional. Rooted in our sensory experience, images are the raw material formulated into organized experience.

As connections suggested by our own prior experience or by social instruction, the working of imagination is a meeting of the individual and the social. The emotionally colored association persists throughout our lives as a loose way of organizing experience in dramatic story form.

Dewey's discussion of the image and of imagination changed over time; much that is implicit in an early essay on the reflex arc (1896/1972f) became more explicit in later works as he focused on specific elements of the developing situation. In that early seminal essay, Dewey described an image as "an anticipatory sensation" (p. 107), a phrase in which sensation points to a classic understanding of image as representative of the world apprehended through our senses and anticipatory refers to an enlarged understanding of the image as a future-projecting element in an ongoing experience. In describing a conflict which prompts an inhibition of activity that leads to a the mind's turning around on itself in order to determine the qualities that will lead to the completion of the activity, Dewey prefigured later discussions of reflective thinking in which the role of the image in a situation is more consciously formulated.

Dewey saw reflective thinking as part of both the historical development of the social mind and the life process of an individual human. Imagination was closely associated with suggestion, the interconnections among images which lead to a deepening of experience and a more widely significant action, and realization, the particular interconnection which associates the

pale and remote with the vivid and near.

In this paper I look at Dewey's understanding of imagination at a particular period of his life, during the years he worked with children, teachers, and parents at the University of Chicago Elementary School, later known as the Laboratory School. Because I am curious to see the interrelation of theory and practice, I tease out the ways that Dewey's theoretical work is embodied in the practice of music education at the school.

The Texts

Dewey was appointed to the department of philosophy at the University of Chicago in 1894. As part of his appointment, which included teaching courses in pedagogy, Dewey proposed and helped establish an elementary school to serve as a kind of laboratory where teachers could conduct experiments in curriculum development. An association of parents helped develop and support this school. During the years that Dewey taught at the University of Chicago he spoke and wrote about the development of young children. Curious about the relation between the teaching practice of the school and Dewey's educational ideas, I have looked more closely at descriptions of the school and at the articles Dewey published during his years at the University of Chicago.

Dewey himself pointed to the close ties between his work and the school itself. The School and Society (1899/1976f) was compiled from speeches he had given to parents, teachers, and other interested observers. How We Think (1910/1985b) was

inspired by his wife "through whose work in connection with the Laboratory School, existing in Chicago between 1896 and 1903, the ideas attained such concreteness as comes from embodiment and testing in practice" (p. 179). Democracy and Education (1916/1985c) is "a writing of a later date, but one which was based upon the earlier theory as that was developed by the experiences gained in the School itself" (Dewey, 1936/1991b, p. 214). The Collected Works of John Dewey (1969-1991), published by Southern Illinois University Press, contain articles, other than these major works, that promote the principles upon which the school was based, define plans for its organization, describe activities that were taking place in the school, and which summarize the discoveries about effective elementary curriculum.

Throughout the school's existence, teachers wrote about their practice. Some of these were published in the University Record and others were pasted in notebooks. A microfilm of these notebooks and published accounts is available from the Special Collections at Milbank Memorial Library, Teachers College, Columbia University. These records served as the basis for The Dewey School (Mayhew & Edwards, 1936/1966), an account of the school assembled in the early 1930s by two sisters who had taught in the school.

These various accounts are the basis for my reconstruction of the relationship between theory and practice.

Revitalizing Texts with the Sympathetic Imagination

I begin with written texts by Dewey and a handful of

teachers. "To read is to interpret" (Gomes, 1996, p. 26). Hermeneutics is a science of such interpretation; hermeneutics directs attention to the process of interpretation and helps us be conscious of aspects we often take for granted.

> A text may have a life of its own, but that life depends upon the author who gave it life, investing it with an intention, a purpose, and a meaning. The text therefore already participates in something other than itself; it participates in, and at least initially gives expression to, the intent of the author. To tease out the relationship of the text and its author is a responsible task, but that task is not the only task of reading, for there is also whatever the reader brings to and finds in the text, and eventually takes from the text. (p. 26)

The texts left by Dewey and the Laboratory School teachers together suggest the context within which I as reader can begin to sense intention, purpose, and meaning. Much of what Dewey published during the last years of the 19th century was originally presented orally to parents and educators who were interested in the work of the Laboratory School; much of what the teachers published were accounts of the daily practice of the school, practice that grew from Dewey's ideas. Together, they suggest a kind of dialogue, a give and take between theoretician and practitioner. I have approached these texts as if they were the record of such a dialogue, all the time wondering where I might begin to sense ways the practice began to feed back into

the theory.

"There is also whatever the reader brings to and finds in the text" (Gomes, 1996, p. 26). I bring more than 20 years of making sense of young children through my own teaching of young children and my reading about children and classrooms. I bring to these texts my own memories of particular faces of particular children making particular pictures of particular events; my particularities give color and flesh to the words I read.

Dewey (1893/1971c) wrote about the use of sympathetic imagination to enter into "human relationships in action" (p. 56).

> [The pupil] is studying the ways in which men are bound together in the complex relations of their interactions. He is not studying, in an introspective way, his own sentiments and moral attitudes; he is studying facts as objective as those of hydrostatics or of the action of dynamos. They are subjective, too, but subjective in the sense that since the pupil himself is one who is bound up in the complex of action, the . . . relations have an interest and concern for him. (p. 56)

A similar demand for sympathetic imagination is placed on me, the researcher, as I interpret these texts. I, too, am looking at people bound together in the complex relations of their interactions. I, too, am bound into those relations, objective as written facts and subjective as interest and concern. I bring my sympathetic imagination to these words and make what sense I can

from them, fleshing them out in my own mind, making the links and connections which only I can make, and rendering them in my own text in as coherent fashion as possible. You, my new reader, considering my purposes from your own vantage point, enter into this growing circle. I hope, among other things, that the interaction of your imagination and my words breathes life into the more distant interaction between Dewey and teachers.

To represent this interaction I will begin with an overview of Dewey's understanding of the importance of imagination in the development of children. As children are moved to think reflectively in response to a problem they take imagination into that process as a means to suggest connections that may be tested in action. Following this overview, I will connect Dewey's understanding to the practice of the music teachers at the Laboratory School, showing ways that the practice embodied these ideas.

The Given and the Suggested in Play

Dewey found evidence for stages of mental development in young children; from an early imaginative stage grows experimental, reflective thinking. The earlier stage is characterized by the child's largely unrestrained activity through which emotionally charged connections are made. Remembered experience is formed into a dramatic whole, or story; this story then gives form to further activities. Interest is largely personal; children are moved by what is familiar, by what they like and dislike. This imaginative period, with its

accumulation of experience as emotionally charged dramatic stories, provides the material to be intellectually formulated and organized during later childhood.

Imagination in Early Childhood Development

A characteristic of young children, "imagination is simply the inner, the mental side of play" (1899/1976d, p. 340). Play and imagination develop in the process of a child's ongoing interaction with the environment (1899/1976e, 1900/1976c). For Dewey, image and activity were intimately connected. The image, he asserted, overflows into activity; if not, the image dies. The energetic activity of a child

> is not only a help to physical growth, but is indispensable to full free mental development. . . . It is accordingly the play period which protects the child from undue specialization; which secures the time and the opportunity for making a great number of experiments and forming a great number of mental connections and interactions, which at the time were useless but which afterward are of utmost importance in efficiency of practical life, to say nothing of richness and depth of personal development. (1900/1976c, p. 198)

With no distinction between process and product, the play activity is its own excuse. The child is engrossed, absorbed in his play (1899/1976d). Others may guide the play, may model or introduce imagery, but the child must be able to make the image his or her own. Children's imaginations can be thwarted by the

imposition of imagery or through an impoverished experience; either way, a store of rich, deep suggestions is limited.

Suggestion echoes throughout Dewey's discussions of the child's imagination. Activities, such as putting on and taking off a hat, are repeated for the sheer pleasure of doing; "the doing, as affording an outlet for an idea or suggestion, suffices" (1900/1976c, p. 196, emphasis added). Play proper begins, Dewey asserted, when the object involves action not through habitual use, but through similarity to another object, "when, that is, suggestion has become roundabout and circuitous" (p. 196, emphasis added). The child calls a hanging watch chain a hammock; he cries "choo choo" while pushing a block. Play involves seeing something as part of a wider experience. Imagination "does not originate, as is often said, in picking out and piecing together parts of a number of disconnected experiences, but rather in the expansion of a given experience through suggestion, into a larger and richer whole" (p. 197, emphasis added).

Suggestion, an evocative association whose correctness is not yet tested, is a kind of thinking which "involves a noted or perceived fact, followed by something else which is not observed but which is brought to mind" (Dewey, 1910/1985b, p. 186). Suggestion may become a habit of conduct as it economizes force by putting "at our immediate disposal the results of our former experience" (1894/1971b, p. 241); as a product of our past adjustments to the environment, suggestion may remain a stream of

loose, emotionally colored associations which provide new channels for the flow of our present activities; or, as gathered into reflective thinking, suggestion may provide hypotheses to be tested as grounds for belief.

In several places (1899/1976f, 1900/1976b), Dewey captured the qualities of this imaginative period in a child's life by describing the story form,

> meaning by story-form something psychical, the holding together of a variety of persons, things, and incidents through a common idea that enlists feeling; not an outward relation or tale. (1900/1976f, p. 97)

Elsewhere Dewey wrote:

> The child is taken up with direct and outgoing activity, on the basis of images and emotions that possess his mind. There is always physical, motor activity; and there is always a story, drama, image--a mental whole. (1900/1976b, p. 225)

Children seek dramatic wholes which are embodied in movement. Children are interested in the steps of experimentation, not as a means to resolve a problem, but in order to see what happens; thus, they enjoy following a recipe to cook a meal, or a set of instructions to construct a pencil box.

Children move beyond this story form as they begin to formulate their own questions. As they discuss their experiences embodied in story form, they become aware of differences among themselves and are able to grasp that they have their own

distinctive viewpoints which are at odds with others'. Adults can guide children

> to develop this matter of doubt and difference into a definite problem, to bring the child to feel just what the difficulty is, and then throw him upon his own resources in looking up material bearing upon the point, and upon his judgment in bringing it to bear, or getting a solution. (Dewey, 1900/1976f, pp. 101-102)

This is the dawning of the truly experimental intellect, the mark of a person who is able to define an end and to choose the means to work toward it.

Reflective Thinking in Later Childhood

Reflective thought, as Dewey (1910/1985b) described it, is stimulated by a felt problem which suspends action in order to follow through a considered deliberation of possible actions and their consequences. Reflective thought is a means of testing connections suggested by prior experience in order that they become evidence for belief. "The consequences of a belief upon other beliefs and upon behavior may be so important, then, that men are forced to consider the grounds or reasons of their belief and its logical consequences. This means reflective thought" (1910/1985b, p. 185).

Suppose a child, who often sat before a fire for warmth, had the habit of connecting fire with feeling comfortably warm; then, one day, in reaching for a bright light, she burned herself. The child, in approaching the fire again, must decide what stimulus

and response are present. Should she continue or abstain from drawing closer to the fire? What had been a habit is now felt as a problem which must be resolved.

> We must have an anticipatory sensation, an image, of the movements that may occur, together with respective values, before attention will go to the seeing to break it up as a sensation of light, and of light of this particular kind. It is the initiated activities of reaching, which, inhibited by the conflict in the co-ordination, turn around, as it were, upon the seeing, and hold it from passing over into further act until its quality is determined. Just here the act as objective stimulus becomes transformed into sensation as possible, as conscious stimulus. Just here also, motion as conscious response emerges. (Dewey, 1896/1972f, p. 107)

The image that Dewey described here is an anticipatory connection of the "movements that may occur" and their "respective values," the consequences of those movements. Motion is suspended while these suggested consequences are considered. The image, with its anticipated connections, becomes the material of thought; attention is directed toward making conscious the prior connections. Once the qualities are determined, then the chosen image, with its consequential movements, overflows into action.

The reasoned conclusion of a process of reflective thinking marks "the close of study into facts, of scrutiny and revision of evidence, of working out the implications of various hypotheses, and of comparing these theoretical results with one another and

with known facts" (1910/1985b, p. 185). Thus, something is believed, not on its own account, but through something else "which stands as witness, evidence, proof, voucher, warrant; that is, as ground of belief" (p. 187).

The data at hand do not provide a solution to a felt problem; they prompt suggestions that arise from past experience or from prior knowledge passed on through instruction. These suggested solutions are examined, turned over, considered in the course of reflective thought aimed at resolving the problem.

Often we act on the basis of habits of action, following through on a suggestion without reflective examination. A pedestrian, seeing a dark cloud in the sky, walks more quickly in order to get indoors before the rain comes. The cloud signifies rain and, without reflection, the habitual action aroused by the image of cloud and rain ensues. When, however, we begin to consider the nature of the connection between the given cloud and the signified rain, studying the color and shapes of the clouds, scrutinizing the connections we are making, working out the implications, we move toward reflective thinking, in which we become aware of the ground of our belief that rain is imminent. "To turn the thing over in mind, to reflect, means to hunt for additional evidence, for new data, that will develop the suggestion, and will either, as we say, bear it out or else make obvious its absurdity and irrelevance" (p. 191).

Reflective thinking develops the suggestions that past experience provides us. The suggestions which arise from a given

situation must be organized; "they must be arranged with reference to one another and with reference to the facts on which they depend for proof" (p. 212). The suggested ideas are combined into "a single steady trend moving toward a single conclusion" (p. 212). This orderliness of thought develops indirectly as a result of pursuing activities related to a single end in which we are interested. Adults, with professions and hobbies, refine skills necessary to reach desired ends; they organize the information related to these activities in a pattern that allows efficient recall.

Thinking, Dewey asserted, is not "a single, unalterable faculty; . . . it is a term denoting the various ways in which things acquire significance" (p. 211). Thinking includes (a) that random flow that William James called a "stream of consciousness"; (b) the loose association of invented and remembered images that hang together with a kind of emotional congruity; (c) beliefs asserted from tradition, instruction, or imitation; (d) the process of conscious inquiry that results in a reasoned conclusion.

> Thinking is specific, in that different things suggest their own appropriate meanings, tell their own unique stories, and in that they do this in very different ways with different persons. As the growth of the body is through the assimilation of food, so the growth of mind is through the logical organization of subject-matter. Thinking is not like a sausage machine which reduces all materials indifferently

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> to one marketable commodity, but is a power of following up and linking together the specific suggestions that specific things arouse. (p. 211)

The direction of thinking is toward meaning, that whole within which "fragmentary and seemingly incompatible data find their proper place" (p. 242). The suggested meaning is a mental standpoint from which data can be defined, from which more observations can be conducted, and from which experimental procedures can be tried out. "All knowledge, all science, thus aims to grasp the meaning of objects and events, and this process always consists in taking them out of their apparent brute isolation as events, and finding them to be parts of some larger whole <u>suggested by them</u>, which, in turn, <u>accounts for</u>, <u>explains</u>, <u>interprets them</u>; <u>i.e.</u>, renders them significant" (p. 272). The four senses of thinking, taken in the order in which Dewey listed them, make tighter and more reliable connections between events and the larger wholes suggested by them.

Dewey (1902/1976j) described a movement from the narrow world of a child imbued with affection and sympathy to the more highly organized and formulated world of curriculum. In the young child's world, the arousing of the image, with its associated action, is a tool for the widening and deepening of experience, as through the course of action, new associations are made and prior ones clarified. Later, the association between an image and what it suggests will, in the process of reflective thought, become ever more clearly formulated as data and meaning.

For Dewey, the two early periods of a child's life can be seen as the intellectualization of imagination: action is able to be restrained; experience is formulated less as story and more as means toward an end-in-view; the whole becomes differentiated into parts; the interest becomes less emotionally and more intellectually charged; the suggestive connections become the material for the testing which leads to a more logically organized subject matter of experience.

"For the most part it is the everyday, homely activities and surroundings of the household and out-of-door life which give the most healthy media of culturing imagination" (1899/1976d, p. 341). In the course of these everyday activities, spooning up the cooked carrots which had been so crisply resistant to slicing, using a stick to dig channels in the mud for the rain to run through, connections are made which, while suggestive, lead to other actions and which, when made conscious through more focused attention in the course of action, provide the material for the tested, well-formulated data that clearly indicate significance.

Assuming that the "processes that educate, the material that instructs, and the mental workings through which knowledge and discipline arise are the same within that they are without the school walls" (1898/1976g, p. 335), Dewey proposed that the school continue "the forms of experience and modes of expression with which the child is already familiar" (p. 335). From the common ground of children's social activities subjects would, over time, be differentiated (1897/1972d, 1897/1976h,

1898/1976g). Cooking, sewing, and carpentry would provide the means of coordinating eye with hand, of increasing attention, of encouraging social cooperation, of cultivating habits of work, of developing skills of planning and following through, and of laying the foundation for related work in other directions (1897/1976h).

Dewey, in a chapter included in The School and Society (1899/1976f), summarized these two principal stages of children's growth between the ages of 4 and 12. The first stage (children from 4 to 8 years old) is characterized

> by directness and promptness of relationship between impressions, ideas, and action. The demand for a motor outlet for expression is urgent and immediate. (p. 73)

The second stage (children from 8 or 9 to 12) is characterized by the child's

> growing sense of the possibility of more permanent and objective results, and of the necessity for the control of agencies for the skill necessary to reach these results. When the child recognizes distinct and enduring ends which stand out and demand attention on their own account, the previous vague and fluid unity of life is broken up. (p. 74)

Once again, we see the initial unity of experience becoming differentiated as children define ends for their actions. The breaking up of the unity of experience into its typical phases brings the child into contact with distinct subject matter; the pursuit of enduring ends leads children to consolidate their

control of methods of work and inquiry that lead to objective results. The unity of experience is the material out of which distinct areas of subject matter can be forged. The store of images assembled in the early years of immediate action becomes material for reflection in the attempt to reach more permanent and objective results.

Expressing an Image

During the late 1890s, Dewey, when presenting plans for the organization of the University Elementary School, insisted on the central role of the image in education:

> The image is the great instrument of instruction. What a child gets out of any subject-matter presented to him is simply the images which he himself forms with regard to it. (1897/1972d, p. 92)

> The work of the teacher is to see that the mental image is formed in the child and opportunity afforded for the image to express itself freely along lines of least resistance, in motor discharge. (1895/1972g, p. 204)

> [Learning] arrives normally when an image in process of expression is compelled to extend itself and to relate itself to other images, in order to secure proper expression. The expansion or growth of imagery is the medium of realization, and this is obtained when the materials of expression are provided, and the end to which these are the

means is recognized by the child. (Dewey, 1895?/1972e, p. 229)

These brief passages point to the image as the content of thought. We can see the importance Dewey placed on the children's formation of images, an importance we today understand as constructivist; on expression; and on the extension and relation of images in the process of expression. The importance of expression is echoed throughout the teachers' accounts of their daily activities in the Laboratory School; I have chosen to draw attention to the accounts of music education. Music education offers examples of Dewey's theory in practice; it raises questions about the theory; and it takes seriously Dewey's statement that imagery is derived from all sense modalities.

In the "School Record" of February 15, 1897, the music teachers were introduced as the Misses Taylor and Whiting, two students of Calvin Cady. Almost a year later ("School Record," January 21, 1898), Miss May Taylor wrote about the principles of the musical method used at the University Elementary School. Later, Mrs. Kern joined the staff and wrote two pieces for the Elementary School Teacher (1903a, 1903b). The themes addressed in these articles parallel ideas expressed by Dewey (1895?/1972e, 1896/1972c, 1897/1972b).

Children's musical intelligence, an early overview ("School Record," February 15, 1897) stated, was developed "through their ability to form and express mental images of musical wholes. . . . The underlying idea is, then, that 'music is idea expressed in

tones, and that its study cannot be successfully prosecuted excepting as the idea is grasped and gradually unfolded into its essential elements; melody, rhythm, and harmony, proceeding from the simple to the complex.'" (It may be Calvin Cady who was being quoted here.) The initial grasping of an underlying musical idea was an element of Mozart's method of composition:

> My subject enlarges itself, becomes defined until the whole, though it be long, stands complete in my mind, so that I can survey it like a picture or a statue, at a glance, nor do I hear in imagination the parts successively but all at once. (Mozart, cited by Taylor, "School Record," February 11, 1898)

Seeing that such a great composer as Mozart first clarified the auditory image he intended to express, the music teachers directed their attention to the mental musical imagery of their young students.

> The musical image is purely auditory, a sequence of tones. Before the question of expression either with piano or voice comes that of re-creating, in the imagination, the tone forms of that piece of music, in order to get the thought to express. And the problem in music education is to develop in the child the ability to think tone forms. . . . Music thinking is not thinking about notes and keys, things that can be seen or touched, it is thinking unseen forms. Piano and voice are only mediums of expression of thought. The first and real work is to realize the idea, the thought,

> that is, the music. (Taylor, "School Record," February 11, 1898)

Thus, music education is an education of the image of tone forms. The material of musical thought are tunes brought to mind.

In order to help children arrive at an appreciation of good music, the music teachers began with the emotional response present in all children (Kern, 1903a). Only within the context of the desire for musical expression can musical symbols and forms be meaningful. Thus, "the chief emphasis is not laid upon acquiring sight-reading, but rather upon the awakening and fostering of a feeling for melody and harmony" (Kern, 1903a, p. 686). The repertoire of the oldest group included songs by Rubinstein, Schubert, Schumann, and Grieg. These were the means for awakening the response to beautiful music. "Formal work [was] constantly subordinated to the chief object of the music work in the school--the awakening of a response to beautiful music" (Kern, 1903a, p. 687). Emotional responsiveness was cultivated with other music as well; the younger children in Groups I and II learned a Christmas song along with "the simple phrases previously studied" ("School Record," December 10, 1896).

The Image as the Tool of Instruction

An image formed in the mind is not the whole of the image. Dewey understood that the image and its expression are intimately connected. One essay (1896/1972c), first published in part in the Western Drawing Teachers' Association Third Annual Report and in full in Kindergarten Magazine, presents imagination and

expression as two aspects of the interaction between a visual image and the act of drawing. Following a form of argument that we recognize as distinctively his, Dewey, searching for a synthesizing principle, first distinguished two seemingly distinct aspects of the art of drawing: the idea from the technique. Some drawing teachers emphasized one aspect over the other, but Dewey noted that when interest is focused on the drawing process, the idea remains hazy and inexact; when attention is focused on the idea, the expression remains empty.

> The <u>via media</u> which is such a difficult path to find [and which Dewey spent his life finding again and again in situation after situation]--the straight and narrow path which makes for artistic righteousness--goes in neither of these directions, but attempts on the one hand to make interest in the idea, the vital image to extend itself to the mode of conveyance, to make the entire interest in technique a functional not an isolated one, while on the other it recognizes the necessity of having the mode of expression react back into the idea, to make it less cloudy, more definite, less haphazard, more accurate, less the product of the momentary undeveloped interest and thought, more the outcome of mature reflection and comprehensive interest. (pp. 193-194)

These final three comparisons sum up what Dewey would look for in education: a formulation that would develop the cloudy, haphazard, product of momentary thought and interest into the

definite, accurate outcome of reflection and comprehensive interest. Such an outcome, with its clear definition of the connection between action and consequence, would be available to direct the efficient course of future action.

Dewey reconstructed the apparent opposition between the imaginative, spiritual idea and the physical, mechanical technique. Spiritual, often used in the 19th century by Hegel and his followers, referred to a range of human activities, activities which we today might describe as mental or cultural. If such opposition between idea and technique were the case, there could never be a balanced interaction, nor any kind of learning, but only an alternation from the mental to the physical (a problem James (1890/1950) had pointed to in his Principles of Psychology). "It is not the problem of the relation of a spiritual image to a physical organ of expression but of one sort of imagery to another" (Dewey, 1896/1972c, p. 194). Thus, the problem is really one of harmonizing ideational and motor imagery makes it "soluble in the educative sense" (p. 194); the two images must be extended and related to each other.

Far from being alternations between the spiritual and the physical, imagination and expression, as the harmonization of two kinds of imagery, are necessary aspects of a single circuit of activity. Drawing, beginning somewhere in the middle of the action, is marking on paper; seeing the sketch; comparing the sketch-as-seen with the sketch-as-projected-idea with images-of-future-markings; inhibiting action as the images are held and the

consequences considered of various marks to be made. One image is chosen and allowed to flow into act. This act then reacts back into the ideational image, recapitulating the sequence just described.

> The realization of an idea in action through the medium of movement is necessary to the vividness, the definiteness, the fullness of the idea itself. We cannot speak of an idea and its expression; the expression is more than a mode of conveying an already formed idea; it is part and parcel of its formation. (p. 195)

I see the dynamic quality of Dewey's understanding of the image. Far from being a static picture that corresponds to a static world, the image, connected, on the one hand, to the mental world of ideas and, on the other hand, to the physical world through action, is in constant interactive formation. The image, viewed from the ideational aspect, anticipates action, projecting movement into the world; the sensation of the world reacts back, through the motor aspect, into the image: the ideational and the motor images extend and relate to each other. The image, as anticipatory sensation, is an index of the interaction between organism and world.

In a later essay (1900/1976c), Dewey would not insist on the distinction between ideational and motor imagery, but he would continue to relate the image to action:

> The arousing of the image is in no sense an end in itself; it has as its function the enlarging and freedom of activity

> through its own motor expression. This expression in turn clarifies and corrects the imagery. It makes it more definite and brings to light the incongruities, impossibilities, and unrealities involved. The expression should operate continually as a selecting and discriminating factor. It should put a premium on those images which bring the child not only into fuller, but into more definite relation to the world of people and things in which he is to live. (p. 202)

Not an end in itself the arousing of the image is a means to the enlarging and freeing of expression; it is instrumental also to the adjustment of the image. Reacting back from expressive action into the image is a phase of interaction between the live human creature and the environment, a more passive phase, an undergoing. It is this phase which clarifies, which defines the relation between creature and world more precisely. Thus, the image is an instrumentality of both the trying and the undergoing phases of an experience (1916/1985c; see page 15.)

Dewey (1902/1991e) recognized that images are not limited to the visual, but include other sensory modalities as well. "We are most accustomed to take simply the eye pictures, the visual pictures, as they are called; but we have also auditory images, mental representations of sounds and tones; motor images, the images of movements, and touch images, images of the feel of different things" (p. 242). Examples from earlier works (1896/1972f, 1896/1972c) often focus on the visual, yet, in

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reading them, we can reconstruct them in the light of his broader definition.

The music teachers at the Laboratory School were aware of the importance not only of forming clear auditory images, as Mozart had done prior to writing down a composition, but also of expressing those images. The music teachers found ways to encourage children to extend and relate auditory images one to another through the process of expression in the context of group composition.

Believing the melody is rendered more definite with words, and that a child will remember words more easily, teachers proposed that the earliest work be on songs with words. Some of the songs taught to the younger children were: "Round and round the big bird flies" ("School Record," February 3, 1897), "Softly the snowflakes float down" and "The wind makes my little boat go" (February 15, 1897). Children were encouraged not only to find their own melodies for given words but also to suggest their own words, such as "Fishy, fishy, bite my hook" (February 15, 1897). With the younger groups, the focus was on "singing for the sake of obtaining a natural, free and joyous expression . . . [of] melodies simple in length, range, intervals, and conception" (February 11, 1898).

Once simple melodies and words were grasped as thought expressed in musical form, then the ideas could be "gradually unfolded into their essential elements; melody, rhythm, and harmony, proceeding from the simple to the complex" (February 15,

1897).

However, when the tonal image is combined with words, problems arise. Musical composition understood as the expression of a tonal image becomes complicated with the addition of words. Will children be expressing tonal forms or will they be expressing verbalized ideas? Will they be responding to the auditory image or to the content conveyed by the words? Just what is the nature of the complete idea expressed in a melodic phrase--could it be a non-linguistic tonal image? These questions are not answered in the accounts of the school; rather the combination of words and melody in song becomes the basis of music education. Whether responsiveness to tonal sequence, independent of words, could be the focus of musical development is not addressed.

The image mediates the organism and the environment. It is a standpoint from which past experience can be connected to the present situation and used to project a plan for future action. As the image moves toward its expressive phase, it must be extended and related to other images. This extension and relation is the means of instruction, of modifying and reorganizing the mind. In order to provoke this encounter among images, teachers and children carried on daily conversations, reviewing their past work, proposing new activity.

Musical Composition as Conversation

Dewey believed that

> the imagination must be really constructive; must find

> outlet in some actual building up of what to the child is reality. The image must result in doing, and in a doing which carries the child beyond his imperfect image and helps correct it and so on. . . . To arouse imagination and leave the matter there is to appeal simply to the sensational and emotional side, and thus to weaken character and dissipate mental energy. (Dewey, 1899/1976d, p. 340)

The constructive musical activity, that carried the child beyond the imperfect image, was the group composition of songs. Simple phrases were composed by the younger children and harmonized by the teacher ("School Record," October 21, 1898). The older children would suggest tunes and would receive criticism from other class members. These critical comments reacted back into the suggested melody, reshaping it. As the children commented on the melody and suggested ways to reconstruct it, they would find uses for such abstractions as pitch, tone, melodic line, etc., abstractions they may have encountered previously but which would now be applied in a more meaningful way.

Dewey understood that the unity of an activity holds together several factors, often understood as opposing pairs: intellectual/emotional, psychical/physical.

> The child is primarily an acting, self-expressing being, and normally knowledge and feeling are held within the grasp of action, growing from it and returning into it. This activity is neither purely psychical, nor purely physical; but involves the expression of imagery through movement. (Dewey,

1895?/1972e, p. 226)

From the unity of the activity, the intellectual/emotional, and mental/physical factors could be abstracted. Musical elements, such as pitch and rhythm, and technical skills, such as note-reading and composing, could be abstracted from the activity of singing songs that were emotionally satisfying and interesting.

From the school's opening, teachers helped children express their thought in a variety of materials:

> In conversation the children have expressed their ideas of the important and interesting events of the farmer's life, such as plowing, milking cows, hunting eggs, etc. Through clay modeling and paper cutting they reproduced such implements as the plow, rake, harrow, etc.; domestic animals and their houses. ("School Record," November 11, 1896)

In writing, the children expressed ideas they were forming about the effects of acid and alkali: "Prescott boiled some tomato for us and then we put some litmus in it and it turned red, so there was acid in it" (November 18, 1896).

This use of group discussion as a means of developing reflective thinking extended throughout the school. As Mayhew and Edwards (1936/1966) explained (and I quote at length because of the wonderful confluence of themes in this passage),

> The method of conducting all classes through the medium of conversation and the free exchange of ideas resulted in a uniform daily procedure which supplied the thread of continuity, for it linked the experience of previous days or

> weeks to the new or continued activity of the present. . . . In all social situations, the ideas formed by the group were tested in action. When necessary, suggestions were given of ways to act, but a margin of the unknown was always left which the child must try out and so face responsibility in his success or failure. An essential moral attitude, now called facing reality, was achieved by the child . . . . To an alert teacher the questions asked indicate the amount of detail to be used at any age. . . . Each classroom was a social laboratory--a place to experiment with ideas which carried a social import. The children tested the efficiency of these ideas by dramatic action. (p. 275)

The three principles of the new psychology Dewey noted (1899/1976f) are evident. The children, being social individuals, were encouraged to compose as a group. Action being central to mind, the music curriculum included actual composition. Mind keeps growing, so that this composition process continued throughout the school from year to year.

A simple melodic phrase is a complete idea both intellectually and musically. Since music was understood as the "expression of thought in simplest melodic phrase" ("School Record," October 30, 1896), it became, in the Laboratory School, an alternative to conversation, clay modelling, paper cutting, and writing.

Group Composition

One of the Lab School's music teachers, Mrs. Kern (1903b),

described the process of group composition. First, children suggested topics for a song. Holidays provided topics; school events led to such songs as "The Club House"; and literature prompted ideas for songs--several that Kern included were based on incidents from Robin Hood. Sometimes several votes had to be taken before a group agreed on a subject. Aware that teachers valued children's expressing their ideas in conversation, I imagine that some of these discussions were heartfelt and lively:

> An opening line being offered, the group passes judgment on it. It is freely criticized by the children as to matter and mode of expression, choice words being substituted for unmusical or slang phrases. . . . When the first line is pronounced satisfactory, the teacher notes it down, and a second line is called for. . . . If a line given be unrhythmic, the teacher repeats this while swinging the pulse suggested by preceding lines, until the children perceive and correct the error. . . . The music is then called for line by line. The teacher takes each melodic phrase as offered and quickly gives it a rhythm-harmonic background in order that the group may better judge of its merit. Rejected phrases are usually as numerous as those accepted. (pp. 18-19)

Kern offered some examples of rejected musical settings of the lines "The day was pleasant, The air was fresh and cool." This was the opening of a song that told about a train excursion.

Through group discussion and comparisons of experiences,

children formed their judgment. Children suggested several options for "The day was pleasant" and, after discussion and comparison, chose one for their final song. This process built an awareness of possible options and lead children to express reasons for their preferences. In the process of composing, the children made comparisons with other songs. One boy wanted the class "Robin Hood" to sound more like "Under the Greenwood Tree" by Eleanor Smith. Once the teacher explained that Smith's song was in a minor key, the children asked to hear theirs harmonized in such a key. "It was received with enthusiasm, the effect produced being what they wanted" (p. 22).

Comparison for Forming Judgments

This process of group composition corresponds to the aesthetic education recommended by the school's art teacher, Lillian Cushman (1904), in which the comparison of artistic expressions would sharpen the appreciation of the harmony between idea and expressive form. Musical standards would become conscious as the children discussed the qualities of the melody they were collectively composing.

Cushman (1904) articulated the balance between free expression and regularity as that between expression and standards. Standards she defined as ideas that have been brought to consciousness (Cushman, 1904, p. 495). The aim of aesthetic development, which can be an aspect of all subject areas, was, Cushman stated, a harmony between idea and sentient expression; therefore, the children needed to develop their sense of the

relation between idea and expression. The means of this development was a method shared with other activities: bringing an idea to consciousness through comparison. "Individual experience may be modified and accelerated by comparison with the results of others" (p. 496). From these comparisons common aspects were abstracted that were then generalized to a variety of cases. In the conversations about the breathing of plants or about the properties of stone weapons, children modified individual experiences and moved toward a more generalized understanding of plant life and mineral properties. Similarly, as the results of aesthetic experiences were compared with results of other such experiences, standards of appreciation were made conscious.

Cushman suggested providing children with examples of visual material from primitive cultures. As children compared such objects to their own work, they would gradually abstract the qualities important to an aesthetic experience. When first confronted with a visual image, the uninstructed child sees a mass of color; the adult, however, see color masses in relationship to each other (Cushman, 1904, p. 496). Similarly, a music teacher pointed out that the "musically intelligent listener perceives masses of tone and shadings, chords, their relationships, that is harmony, and the outlining boundary, that is melody" (Taylor, "School Record," February 11, 1898). Again, through comparison of musical images, the children would grow to perceive these related masses of tone.

Cushman's aesthetic principles were applied to music education at the University Elementary School: (a) Children were free to express musical images; (b) these expressed images were compared with those from a growing collection of models; (c) through an organized series of experiences, children acquired an understanding of law and regularity in connection with their musical interest and thus musical responsiveness was formed. Since "aesthetic development is an endless succession of such experiences" (Cushman, 1904, p. 496) in which children compare artistic products, the teacher is challenged to organize materials that guarantee an educative development, moving toward a coherent formation of responsiveness. In the descriptions of the curriculum for music education at the Laboratory School such an organization is evident.

The Limits of Music Education at the Lab School

The accounts of music education in Dewey's Laboratory School embody the major concepts of Dewey's theory of the role of imagination in experience, as he wrote about it in works related to the school. The image plays an operative role in the ongoing interaction between the person and the environment; it serves as an anticipation of what may occur. Constructed from all sense modalities, the image is a vehicle of suggestion, linking what is given at hand to what is consequentially possible. Children attending the Laboratory School were encouraged to understand the musical image as expressive of an idea, similar to the ways that their modeling clay, drawing, and oral storytelling, were all

expressive; they were helped to compose songs to reconstruct familiar experiences, such as field trips, club houses, and the like, and experiences they were encountering in stories, such as those involving Robin Hood, Will Stukely, and Maid Marian.

Expression is not subsequent to the image, but is formative of the image, making it clear, accurate, and definite. As with other modes of expression, children were supported in their efforts to sing about their experiences; and they were helped to think critically about the meaning of musical phrases that others expressed and to offer alternative expressions. Through the give and take of this group composition, musical attributes such as tempo, rhythm, and tone, became meaningful. Standards of musical excellence were made conscious.

Making conscious these various musical associations is analogous to the process of reflective thinking. Feeling that a phrase is not adequately expressive, the young composers are called to consider what precisely they wish to convey and what other means they have to convey such a result.

However, the music education at the Laboratory School leaves us hanging in one particularly significant way. On the one hand, the teachers recognized that music is an auditory image; on the other hand, the musical composition of the children is always connected to words. At what point will these children become conscious of the structure of musical compositions? When will they be helped to hear the imitation and variation of musical motives from which music is built?

The association with words may be pedagogically solid, especially in light of Dewey's understanding of the story form of young children's imaginative life. Imagination links persons, things, and incidents on a loose, emotionally colored thread; and there is always a mental whole, a story, a drama, an image (1900/1976f, 1900/1976b). Because he recognized the story as an organizing whole, Dewey directed attention to the verbal structuring of situations.

However, I believe that Dewey ignored an alternative mode of organizing a mental whole, a mode I will, for now, call the rhythmic tune, a whole whose structure and appeal is based on inflectional and rhythmic imitation and variation. With such a rhythmic tune, we render our experience as pure sound. Parents and babies imitate cries of glee, imitating pitch and inflection. Older children build long chants from rhythmic imitations. I recall moments in a preschool classroom when a chant begins to form and to spread across the room, a chant such as "We are cleaning up, we are cleaning up, we are cleaning up," which has as its principal appeal, not the content of the words, but rhythm and imitation.

In his lectures at Brigham Young Academy, Dewey (1902/1991e) stated that images include other sensory modalities "We have also auditory images, mental representations of sounds and tones; motor images, the images of movements, and touch images, images of the feel of different things" (p. 242). Yet, in his work with school children he did not explore the ways that these other

modalities could be organized into wholes. I am left with my own musing about what might have developed had Dewey and the school's music teachers had more time together to listen to the children's compositions, and to reflect further on the multiple ways children were expressing their ideas. I wonder if Dewey might eventually have included song-form as one of the ways to organize experience imaginatively.

Realization

Throughout our lives, we continue to make emotionally colored connections within our experience and form such connections into dramatic wholes. The image is a vehicle for enlarging the everyday experience of the child; through accumulation of unconscious suggestion such experience is made fuller and richer. This accumulation of experience in dramatic wholes becomes the raw material for a more intellectually formulated body of experience. Through the processes of reflective thought these loosely associated connections become more exactly formulated and, tested by the experimentation which establishes the consequences of actions, become evidence for belief.

This enlarging of experience by imagination is not to be an escape, for the "defining character [of imagination] is that it uses the actually seen or experienced thing as a basis about which are centered and gathered a large number of suggestions and appropriations" (1900/1976c, p. 201). Imagination, when allowed to flow over into expressive action which corrects and clarifies

the image of the incongruous, the impossible, and the unreal, brings the child "into more definite relation to the world of people and things in which he is to live" (p. 202).

As we develop through the course of our childhoods, we are able to resist the need for an image to overflow into action; we are more able to follow the consequences through mental realization. When faced with a problem whose solution is not provided by the data at hand, we take the risk of mentally leaping into what is suggested, into what we can infer from the situation in hand. "Suggestion is the very heart of inference; it involves going from what is present to something absent. . . . The suggested conclusion so far as it is not accepted but only tentatively entertained constitutes an idea" (1910/1985b, p. 239). The imagination, that capacity to generate suggestions, is not limited to sensory images, but includes reminiscences and anticipations, as well as the more tentative and abstract formulations of our experience.

We follow up the suggestions, we organize, arrange, and link together specific suggestions. "The process of developing the bearings--or, as they are more technically called, the implications--of any idea with respect to any problem, is termed reasoning" (p. 239). We test conjectured solutions against the given facts of the situation; we need not put each conjecture into action, but are able mentally to realize their implications.

In his major work on the philosophy of education (1916/1985c), Dewey highlighted this aspect of imagination. "The

engagement of the imagination is the only thing that makes any activity more than mechanical" (p. 244). Dewey distinguished appreciative realization brought about through imagination from symbolic or representative experiences. Symbolic experiences are not those we have immediately apprehended but are those which have been conveyed through mediated language; my experience of John Dewey, May Taylor, Lillian Cushman, and Mrs. Kern, is, initially, a symbolic experience, rendered through the words and narrative structure of a novel. However, as I imaginatively connect the symbols to my own experience, Dewey and Mrs. Kern are realized. Through my imagination, I return the flesh and color to abstracted ideas. I bring into focus a classroom with wood floors and long bright windows where a boy sings a musical phrase he thinks fits the song a little better than the one just sung by the teacher.

Although distinct from symbolic experience, appreciative realization is not distinct from intellect; realization is necessary for understanding.

> An adequate recognition of the play of imagination as the medium of realization of every kind of thing which lies beyond the scope of direct physical response is the sole way of escape from mechanical methods of teaching. The educative value of manual activities and of laboratory exercises, as well as of play, depends upon the extent in which they aid in bringing about sensing of the meaning of what is going on. . . . The imagination is as much a normal and integral

> part of human activity as is muscular movement. . . . Were it not for the accompanying play of imagination, there would be no road from a direct activity to representative knowledge; for it is by imagination that symbols are translated over into direct meaning and integrated with a narrower activity so as to expand and enrich it. (Dewey, 1916/1985c, pp. 245-246)

This passage sends me back to Dewey's definition of learning 20 years earlier, as part of his plan for the organization of the University Elementary School:

> [Learning] arrives normally when an image in process of expression is compelled to extend itself and to relate itself to other images, in order to secure proper expression. The expansion or growth of imagery is the medium of realization, and this is obtained when the materials of expression are provided, and the end to which these are the means is recognized by the child. (Dewey, 1895?/1972e, p. 229)

In both of these passages, Dewey conveyed the importance of expressive activities by means of which children are able to connect the present and immediate world to more abstract formulations that serve as tools to organize their experience.

Dewey Today

The research on which this paper is based involved realization, the play of imagination interacting with the symbolic representations of various written texts in order to

discover new meaning. As any act of imagination links prior experience to future action, so I find that I look toward my future in teacher education with a new outlook. My imaginative reconstruction of Dewey and the teachers of the Laboratory School, gives me an invigorating example of a school which encouraged young children to express ideas in multiple ways, which expected teachers to observe closely, to question, and to try new pedagogical practices. I share this example with students as a way to challenge our current understanding of education.

Most significant for me is Dewey's language. In a world infused with Piagetian schemas, it is refreshing to talk of images, to root my conversation with students in English words that carry something of the concrete and emotional richness of everyday life. In a time filled with Vygotskian sociocultural theory, I love to turn to an American who wrote so eloquently of the social context of our learning, of the cultural formation of mind. I am glad to be able to come to my students, taking their first steps into the world of teaching young children, and to point to men and women who went before, who listened to young children, who entered into young lives and made a lasting difference.

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